

# DATA STORAGE DEVICE AND DATA SAVING METHOD THEREOF

## ABSTRACT

5 A data storage device is applied to store digital medium data by using  
the DRAM to replace the flash memories for data storage. The data storage  
device comprises an interface converter used for transforming an interface  
of a flash memory into an interface of a dynamic random access memory.  
The interface converter is connected to a dynamic random access memory  
for storing the data stored in the data storage device. Further, the data  
10 storage device also comprises a battery capacity detector used to detect the  
capacity of a battery connected with the data storage device and deliver a  
signal representing the battery capacity into a controller. When the battery  
capacity detector detects the battery capacity reaching a pre-determined low  
electricity margin, the residual electricity is saved for the dynamic random  
15 access memory to operate the saving of the data and the high  
power-consuming components in the circuit are stopped.

09927828.081001